

Organizing a Program for Dental Care in a Neighborhood Health Center

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WILL AN OPTIMAL level of oral health result from dental services designed to meet the social, economic, and health characteristics of a particular population group? An affirmative answer to this question is the objective of the Tufts-Columbia Point dental program, a joint project of the Tufts School of Dental Medicine and the Office of Economic Opportunity (OEO).

This project, which will not reach full-scale operation until the fall of 1968, is a component of an OEO neighborhood health center in Boston, Mass. It follows by about 2 years the initiation of the Tufts-Columbia Point Medical Service Program, which provides medical care for ambulatory patients and refers patients for special care to other community facilities.

Although funded by OEO, the planning and operation of the medical service program has been shared by several departments of the Tufts School of Medicine, with principal responsibility and leadership residing in the department of preventive medicine. Similarly, responsibility

for the development of the dental program rests in the department of social dentistry, Tufts School of Dental Medicine, where Dr. Gerrie provides general supervision over the dental project, and Dr. Ferraro is in immediate charge of program planning and implementation.

Both the medical and dental programs at Columbia Point exemplify growing functions of the Tufts University Schools of Medicine and Dental Medicine in exploring, developing, and implementing community-oriented activities. The purpose of these activities is to define the role of the professional health education facility as an integral part of the community's resources for health services.

The Columbia Point Housing Project

Columbia Point is a low-income apartment housing project under the administration of the Boston Housing Authority and is on a peninsula of filled land in Boston Harbor. Although a part of the city proper, it is some distance from other settled areas, and its isolation is accentuated by water on three sides and two elevated motor expressways and a large park area on the landward side.

Eligibility for housing is determined by a maximum aggregate family income which is below an approved income limit. The median weekly income per household is \$35, and 64 percent of the households derive their income from sources other than earnings. A "family" may range in size from one person to as many as eight

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or 10, and in age from a newborn infant to persons 80 years old; the median age is 12 years, and 65 percent of the population is under 20. The total population of Columbia Point is estimated at 5,200, or about 1,340 family units averaging 3.9 persons per unit. About half the families are nonwhite.

Planning the Dental Program

The Columbia Point dental program is being established to provide a health service which the residents requested when asked to indicate their most important health needs. A structured questionnaire, requiring 1 hour to administer, was used to gather key information from 4,700 persons in 1,126 apartments, representing 83 percent of the occupied dwelling units. Residents said their need for dental care was exceeded only by their need for mental health services.

Recognizing this evidence of interest in dental care, and following basic OEO guidelines, provisions have been made at every important step in planning the dental program for maximum feasible participation of the community. Collaborating in this effort is the Columbia Point Health Association, a voluntary incorporated organization of residents, which elects its own officers and assists in the formulation of neighborhood health center policy.

Inclusion of both community and project representatives in planning the dental program serves two useful purposes. The association members provide the best direct line available for communicating information regarding the health center and its services to the people, and the members of the organization are expected to promote greater use of the dental clinic by residents.

Development of the dental program has been concerned with two main considerations. One consideration is the people to be served—their economic, cultural, and educational characteristics; the other consideration is the clinic, which provides the dental services, and its staff and administration. Both considerations are so intimately related and interdependent that planning from the beginning has consciously and continuously recognized that ignoring one consideration at the expense of the other could well determine success or failure of the program.

Need for Preventive Dentistry

We are firmly convinced that merely caring for the residents' self-diagnosed emergency dental needs will not be desirable or sufficient if the project is to attain the best possible oral health for the people served. The money, manpower, and materials are available to operate a clinic which, under yesterday's prevailing practice, could be limited to providing the palliative and restorative dental treatment sought by persons who have concluded, through self-diagnosis, that a condition has reached a point where dental services are required.

Such persons all too often insist on treatment for the immediate emergency only; others are agreeable to receiving complete care for their needs of the moment. Too frequently, however, most of these patients then revert to their established dental care pattern, and subsequently seek treatment only when the next self-diagnosed crisis arises.

Modern dental services, whether given in the private dental practitioner's office or the public clinic, tend to emphasize preventive dentistry as well as restorative dentistry. Therefore the Tufts-Columbia Point dental program will attempt to change the behavioral pattern of the residents from crisis orientation to prevention orientation. Although maximum emergency and restorative services will be provided, both quantitatively and qualitatively, maximum preventive services will be emphasized.

Every effort will be made to get the community's residents to adopt a pattern of regular periodic visits to the clinic for examination, diagnosis, needed preventive and restorative treatment, and for instruction in personal preventive oral health practices, beginning early and continuing throughout life. We do not underestimate the difficulty of this task. A sustained educational program adequate to attain the desired motivation will be required for the duration of the dental program.

Objectives of the Dental Program

To pursue a successful program of preventive dentistry, however, encompasses more than routine regular visits, topical fluoride applications, and dietary counseling. These measures will fall far short of accomplishing their intended purpose unless consideration is given to fostering

mutually consistent attitudes among both the dental staff and the persons served.

Our objective is to foster in the people of Columbia Point a receptive personal attitude toward oral health in which they will be aware of and practice those preventive measures which they can perform for themselves and seek those preventive measures which a dentist must carry out. Therefore, we plan to have residents participate actively in the program and to avoid insofar as possible just providing care to passive recipients.

Correspondingly, our objective with the dental staff is to develop an appreciation of preventive dentistry and skill in the use of preventive techniques and measures in family health care. These techniques and measures will be carried out as an integral part of a comprehensive, family-centered health service program.

Too many people do not seek dental care when they should. Among the reasons for not seeking care are cost, fear, ignorance, indifference, inaccessibility, and lack of effective referral and recall systems. Incorporated into the dental program will be features that take cognizance of these deterrents and help to eliminate patients' emotional barriers.

For example, on the assumption that fear of the dentist is a learned response to undesirable conditioning influences, two educational projects are planned to counteract factors which we feel are significant in generating fear of the dentist in children before they have either encountered a dentist or experienced dental treatment.

The first project stresses the favorable conditioning influence of the mother on the attitude of her child toward dentistry. Mothers will be informed of the need to refrain from highly colored and embroidered accounts of their personal dental experiences in the hearing of young children. Mothers also will be instructed in the value of regular visits to the dentist to avoid possible emergency treatment, but, more important, to demonstrate to the child by example that regular dental visits are the accepted pattern of good health behavior in the family (1).

The second educational project is arranging for supervised visits to the dental clinic by small groups of 3-year-olds to acquaint them with the dentist and his equipment before the child needs

to visit the dentist for treatment. Since 95 percent of the population will require dental care at some time during their lives, we consider it essential to insure that the child's first visit to the dentist is an occasion both for initial orientation to the dentist and his equipment and for treatment, particularly under emergency circumstances. Both educational projects aim to reduce or preclude exposure of the child to unfavorable preconditioning influences before he has visited the dentist.

We feel that the dental program should be designed to assure the people of Columbia Point of warm, personal care; continuing and comprehensive care; and technically excellent care.

Warm, Personal Care

Dental disease causes enough pain and discomfort so that people generally have a long established antipathy toward its more common manifestations. Frequently treatment of dental disease is associated with unavoidable additional pain and discomfort, and resentment toward dental care is reinforced. Furthermore, if the patient is treated in a cold, impersonal professional manner by the dentist, it is unlikely that the patient will develop a cooperative attitude toward his future dental health.

The private practitioner recognizes this principle when he acknowledges the importance of a good chairside manner in gaining and retaining patients and in successfully treating their needs. Warm, personal care is not offered consistently by salaried dentists and staff in public clinics, where the patients are wards of the government or recipients of welfare assistance. From the inception of the Columbia Point dental program, all staff are requested to promote a feeling in patients that they are welcome.

The family health group approach, with a particular dentist assigned primary responsibility for the dental health of all members of a family, is expected to enhance the establishment and maintenance of warm, personal care at an acceptable level. To assist in this process a number of inservice training procedures are contemplated, such as a period of orientation for newly employed dentists, 6 months' training during a trial period, and continuing education in dental and sociological subjects.

Continuing and Comprehensive Care

Periodic patient recall for examination, diagnosis, and treatment on a schedule geared to the oral health needs of the patient has been for many years an accepted feature of successful preventive dental practice. For example, it seems obvious that the patient who is unusually susceptible to dental disease should be examined more frequently than a patient who is relatively immune. Because patients of all ages will be treated in the Columbia Point program, a recall system is contemplated that will be in accord with the needs of the individual patient and be emphasized strongly because it is an essential component in the success of the preventive program.

One innovative feature of our planned patient recall system at Columbia Point, we hope, will overcome a weakness in the recall systems of publicly supported dental clinics (2). Many public clinics have recall systems that are successful in getting patients to return periodically for examination and care as long as they are eligible for service.

This success is particularly true of programs for school children. It has been observed, however, that when children became ineligible for care because of age, and were no longer under the public clinic recall system, they ceased visiting the dentist regularly for care and, within a few short years, were found to have accumulated oral disease typically caused by neglect.

Several factors seemingly have contributed to this outcome. The children and their cooperative but complacent parents had not been convinced that regular visits to the dentist were essential to continuing oral health. The pattern of visiting the dentist only when care was obviously needed had not been replaced with a solidly established pattern of regular visits for preventive reasons.

As long as the dental clinic assumed exclusive responsibility for a health practice which should properly have been shared equally by both clinic and patient, this type of recall system served adequately. The limitations of this system become apparent when the parent and child alone must be responsible for observing a practice which had not become an established part of their health behavior pattern.

To counter the prospect of duplicating the experience of other programs, the Columbia

Point dental program will design and incorporate educational programs directed toward both parents and children. These programs will emphasize the direct relationship between attainment and maintenance of good oral health and regular visits to the dentist.

We plan to experiment in developing ways of inducing parents and children to accept primary responsibility for seeking regular dental appointments or at least sharing the responsibility with the dental clinic. The main objectives will be to divert parent and child from reliance on the clinic as the authoritative influence and to instill a strong sense of responsibility for personal and voluntary action in securing dental appointments.

The family health group approach should lead to greater cooperation by patients in keeping recall appointments after initial treatment is completed. To motivate family and patient to keep recall appointments, we plan to institute a routine procedure for reminding patients of the appointment several days beforehand.

Dental services for the people at Columbia Point will encompass all scientifically proved measures and services deemed essential to prevent and treat dental diseases and disorders and to attain and maintain good oral health. Pending the success of efforts to secure fluoridation of the Columbia Point water supply, topical fluoride applications to prevent decay will be carried out on groups of children in order to reach as many children as possible with this measure.

Incremental dental care programs, also, will enable children to advance quickly from treatment of their accumulated dental needs to a maintenance program for care of needs as they occur. Wide latitude in policy will allow the clinical dentists to choose among alternatives in a patient's treatment.

The dental clinic will be staffed during hours decided upon by the community to encourage use and for the convenience of patients such as mothers with young children and mothers and fathers who are working during the day.

Technically Excellent Care

We once believed that only the very rich and the very poor received good medical care. There is now reason to believe that the very poor have

been getting a comparatively poor standard of medical care. Whether this may be true of recipients of publicly supported dental care is subject to opinion and conjecture. At any rate, regardless of how standards may vary elsewhere, a double standard of care will not be tolerated in the Columbia Point dental program.

The quality of dental care at the Columbia Point clinic will be insured primarily through the procedures to be employed in attaining quality control. Starting salaries and salary range for clinical dentists will be set sufficiently high to recruit competent dentists. Mechanisms for screening candidates for appointment, such as personal interviews and review of professional qualifications based on training and experience, can do no more than select those who have the presumed potential for satisfactory performance; therefore, all appointments will be probationary.

Continued position tenure will be based on sustained high-level performance, and it is planned that all applicants selected will read, and sign before employment, a memorandum which sets forth the conditions for continued employment. This memorandum advises the applicant that his technical competency will be evaluated periodically by dentists from the teaching faculty at Tufts School of Dental Medicine.

Any dentist whose work is considered by the evaluating group to be below an acceptable level of competency will be so advised, and he will have an opportunity to improve his performance during the interim before the next evaluation. Continued substandard competency will be grounds for dismissal.

All dentists are not necessarily highly competent in all areas of dental practice, and evaluations will be kept flexible. The dental clinic is expected to be a form of group practice and, although one dentist will be the family dentist, he can refer patients requiring special treatment to other dentists in the clinic or to outside specialists.

Nearly all residents of Columbia Point are eligible for health services under Medicaid or programs supported by OEO and, if a person is under the age of 21, he has the option of obtaining dental care from the clinic or from dentists in private practice who are participating

in the Medicaid program. To some degree, then, the clinic staff is in competition with the private dental practitioners in the general area.

The dental clinic has only two advantages—its convenience and accessibility to residents and the fact that dental services are a part of the family-centered health services at Columbia Point.

Therefore, although the clinic fills a void in local health services, the dental staff will need to provide services at least comparable to those available from dentists in private practice to merit the clinic's continued existence.

Auxiliary Dental Personnel

To enable each clinical dentist to provide quality dental care to as many patients as possible, it is planned to employ not less than two chairside dental assistants for each dentist. The assistants are to be recruited from the residents at Columbia Point, and they are expected to promote use of the clinic services because of their day-to-day personal contacts with residents.

Training six to eight residents as assistants will contribute to the general objective of the Columbia Point health services program: to break the cycle of poverty-illness-unemployment. These assistants, after training and a period of experience, will be encouraged to seek employment elsewhere in order to promote mobility from Columbia Point and to permit a continuing training program.

The assistants will be trained by a qualified instructor. They will receive whatever dental care they require to attain and maintain oral health as a condition of their employment. The initial staffing plan also provides for two dental hygienists and a receptionist.

Both dentists and dental hygienists will be expected to educate patients by emphasizing relevant aspects of preventive dentistry. No general dental health education program for residents is contemplated; instead we plan to conduct highly specific educational activities and projects designed to accomplish selected objectives under conditions where they can be evaluated.

The extent that the residents of Columbia Point will use the dental clinic cannot be predicted. To enhance use, however, an ongoing

working relationship has been established by the program director with the committee of residents who represent local interests in the project to discuss plans and to obtain reactions. The staff will modify plans whenever feasible in accordance with suggestions and sentiment of the citizens' committee. This relationship will also provide a way for the staff to hear complaints and grievances as well as to disseminate information about the program.

In the process of developing and implementing plans for the Columbia Point dental program we have had also, of course, to concern ourselves with the architectural and engineering requirements of remodeling apartments into a dental clinic; with the details of selecting and purchasing equipment and supplies; and with plans for staffing, recruitment, and training. We have preferred to discuss in this paper some of the more salient features which have preoccupied us in designing a dental program that is at least as much concerned with the needs of the people who will receive care as with the requirements of the staff who will render the services.

Summary

Some of the preventive features and behavioral patterns frequently overlooked in public dental programs will be emphasized in the dental services which will be a component of the Tufts-Columbia Point health services program. This joint project of the Tufts Schools of Medicine and Dental Medicine and the Office of Economic Opportunity serves low-income families in a Boston, Mass., housing project. By the fall of 1968 its staff will give restorative treatment to Columbia Point residents of all ages as well as employing maximum preventive measures.

Most persons seek dental care only after self-diagnosis and in emergencies. Two educational

projects are planned to replace this prevalent pattern with a pattern of regularly seeking examination for preventive and restorative treatment. The first project stresses the favorable conditioning influence of the mother on the child's attitudes toward dentistry. Mothers will be cautioned to speak positively about their dental experiences and to demonstrate by example that regular dental visits are the accepted pattern of good health behavior in the family.

The second project is arranging supervised visits to the clinic by small groups of 3-year-olds to acquaint them with the dentist and his equipment before they need treatment. Efforts will be made to instill in the children a strong sense of personal responsibility for voluntarily seeking regular examination so that they will continue this pattern when they are no longer eligible for care at a public clinic.

Quality of care will be insured by careful recruitment of staff and periodic evaluation of dentists' clinical performance by faculty members from the Tufts School of Dental Medicine. Each dentist will have two chairside assistants to insure maximum use of his skills. Six to eight Columbia Point residents will be recruited and trained as chairside assistants. After a period of experience, they will be encouraged to seek employment elsewhere to promote mobility from Columbia Point and to permit a continuing training program. This vocational training is expected to contribute to the general objective of the health services program of breaking the cycle of poverty-illness-unemployment.

REFERENCES

- (1) Lambert, C., and Freeman, H. E.: *The clinic habit.* College and University Press, New Haven, Conn., 1967, pp. 84, 88, 89.
- (2) Young, W. O.: *How would incremental care programs for children work?* *J Amer Dent Assoc* 64: 179, 180, February 1962.